

# ***FM/AM Compact Disc Player***

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Operating Instructions \_\_\_\_\_

**US**

## **Owner's Record**

The model and serial numbers are located on the bottom of the unit.

Record the serial number in the space provided below.

Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CDX-2250 Serial No. \_\_\_\_\_

For installation and connections, see the supplied installation/connections manual.



## ***CDX-2250***

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## Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

## CAUTION

The use of optical instruments with this product will increase eye hazard.

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## Welcome !

Thank you for purchasing the Sony Compact Disc Player. This unit lets you enjoy a variety of features.

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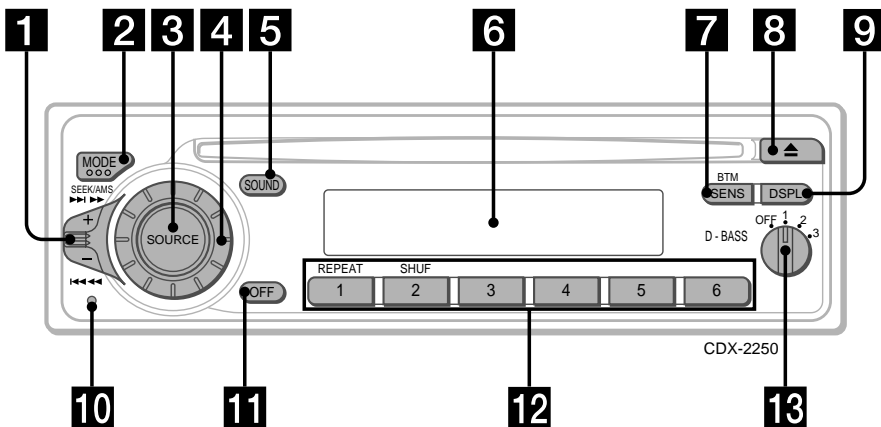
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## Location of controls



Refer to the pages for details.

- 1** SEEK/AMS (seek/Automatic Music Sensor/manual search) control 6, 8
- 2** MODE (band select) button 7
- 3** SOURCE (source select) button 6, 7
- 4** Dial (volume/bass/treble/left-right/front-rear control) 5, 8
- 5** SOUND button 5, 8, 9
- 6** Display window
- 7** SENS/BTM (sensitivity adjust/Best Tuning Memory) button 7, 8
- 8** ▲ (eject) button 6
- 9** DSPL (display mode change/time set) button 5, 6, 8

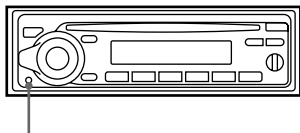
- 10** Reset button 5
- 11** OFF button 6, 8
- 12** During radio reception:  
Number buttons 7  
During CD playback:  
① REPEAT button 6  
② SHUF button 6
- 13** D-BASS control 9

# Getting Started

## Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.

Press the reset button with a pointed object, such as a ball-point pen.



Reset button

### Notes

- Pressing the reset button will erase the clock setting and some memorized program and memory functions.
- When you connect the power supply cord to the unit or reset the unit, wait for about 10 seconds before you insert a disc. If you insert a disc within these 10 seconds, the unit will not be reset, and you will have to press the reset button again.

## Setting the clock

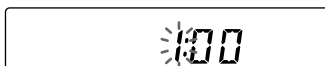
The clock has a 12-hour digital indication.

Example: To set the clock to 10:08

### 1 Press **(DSPL)** during operation.

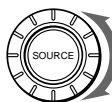
If the POWER SELECT function is set to "ON," go to step 2. If it is set to "OFF," set to "ON" (page 8).

### 2 Press **(DSPL)** for two seconds.



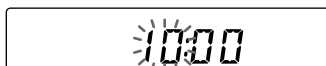
The hour indication flashes.

#### 1 Set the hour.

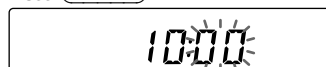


To go backward

To go forward

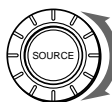


#### 2 Press **(SOUND)**.



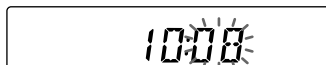
The minute indication flashes.

#### 3 Set the minute.

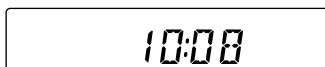


To go backward

To go forward



### 3 Press **(DSPL)**.



The clock starts.

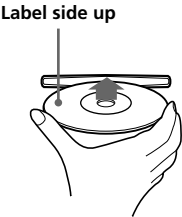
### Note

If the car has no accessory position on the ignition key switch, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio, or started CD playback.

# CD Player

## Listening to a CD

Insert a CD.  
Playback starts automatically.



If a CD is already inserted, press **(SOURCE)** repeatedly until "CD" appears to start playback.



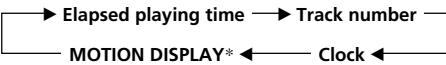
Elapsed playing time

**Note**  
To play back an 8 cm (3 in.) CD, use the optional Sony compact disc single adapter (CSA-8).

To	Press
Stop playback	<b>▲</b> or <b>(OFF)</b>
Eject the CD	<b>▲</b>

### Changing the display item

Each time you press **(DSPL)** during CD playback, the item changes as follows:



\* All the above items are scrolled in the display one by one in order.

## Locating a specific track — Automatic Music Sensor (AMS)

During playback, push the SEEK/AMS control up or down and release for each track you want to skip.

To locate succeeding tracks



To locate preceding tracks

## Locating a specific point in a track — Manual Search

During playback, push the SEEK/AMS control up or down and hold for about two seconds. Release when you have found the desired point.

To search forward



To search backward

**Note**  
If "LLLL" or "rrrr" appears in the display, you have reached the beginning or the end of the disc and you cannot go any further.

## Playing a CD in various modes

### Playing tracks repeatedly — Repeat Play

Press **(1)** during playback.  
"REP" appears in the display.

When the current track is over, it will play again from the beginning.

To return to normal playback mode, press again.

### Playing tracks in random order — Shuffle Play

Press **(2)** during playback.  
"SHUF" appears in the display.

To return to normal playback mode, press again.

# Radio

## Memorizing stations automatically

### — Best Tuning Memory (BTM)

This unit selects the stations with the strongest signals and memorizes them in the order of their frequencies. You can store up to 6 stations on each band (FM I, FM II, FM III, and AM).

### Caution

When tuning in stations while driving, use Best Tuning Memory to prevent accidents.

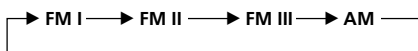
- 1 Press **(SOURCE)** repeatedly to select the tuner.

Each time you press **(SOURCE)**, the mode changes as follows:

**CD ↔ TUNER**

- 2 Press **(MODE)** repeatedly to select the band.

Each time you press **(MODE)**, the band changes as follows:



- 3 Press **(SENS/BTM)** for two seconds.  
The unit stores stations in the order of their frequencies on the number buttons.  
A beep sounds when the setting is stored.

### Notes

- The unit does not store stations with weak signals. If only a few stations can be received, some number buttons will retain their former setting.
- When a number is indicated in the display, the unit starts storing stations from the one currently displayed.
- If a CD is not in the unit, only the tuner band appears even if you press **(SOURCE)**.

## Memorizing only the desired stations

You can store up to 6 stations on each band (a total of 18 for FM I, FM II, and FM III, and 6 for AM) in the order of your choice.

- 1 Press **(SOURCE)** repeatedly to select the tuner.
- 2 Press **(MODE)** repeatedly to select the band.
- 3 Push the **SEEK/AMS** control up or down to tune in the station that you want to store on the number button.
- 4 Press and hold the desired number button (**1** to **6**) until “MEM” appears. The number button indication appears in the display.

### Note

If you try to store another station on the same number button, the previously stored station will be erased.

## Receiving the memorized stations

- 1 Press **(SOURCE)** repeatedly to select the tuner.
- 2 Press **(MODE)** repeatedly to select the band.
- 3 Press the number button (**1** to **6**) on which the desired station is stored.

**continue to next page →**

**If you cannot tune in a preset station**

Push and release the SEEK/AMS control up or down to search for the station (automatic tuning).

Scanning stops when the unit receives a station. Push the SEEK/AMS control up or down repeatedly until the desired station is received.

**Note**

If the automatic tuning stops too frequently, press (SENS/BTM) repeatedly until "LCL" (local seek mode) is displayed. Only the stations with relatively strong signals will be tuned in.

**Tip**

If you know the frequency of the station you want to listen to, push the SEEK/AMS control up or down and hold until the desired frequency appears (manual tuning).

**If FM stereo reception is poor**  
**— Monaural Mode**

Press (SENS/BTM) repeatedly until "MONO" appears.

The sound improves, but becomes monaural ("ST" disappears).

To return to normal mode, press again until "MONO" disappears.

**Changing the display item**

Each time you press (DSPL), the item changes as follows:



\* All the above items are scrolled in the display one by one in order.

## Other Functions

### Adjusting the sound characteristics

You can adjust the bass, treble, balance, and fader. You can store the bass and treble levels.

**1 Select the item you want to adjust by pressing (SOUND) repeatedly.**

BAS (bass) → TRE (treble) → BAL (left-right) → FAD (front-rear) → VOL (volume)

**2 Adjust the selected item by rotating the dial.**

Adjust within three seconds after selecting the item. (After three seconds, the dial function reverts to volume control.)

### Turning on the clock display — Power Select Function

Only for cars with an accessory position on the ignition key switch

**To turn the Power Select Function ON**

Press (OFF) while pressing (SOUND).

The Power Select Function ties the clock display power to the accessory position on the ignition key switch.

To avoid battery wear, the clock is not displayed while the unit is initializing.



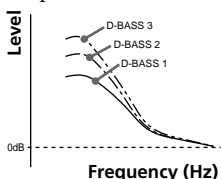
# Changing the sound and beep sound

## Boosting the bass sound — D-bass

You can enjoy a clear and powerful bass sound.

The D-bass function boosts the low frequency signal with a sharper curve than conventional bass boost.

You can hear the bass line more clearly even while the vocal remains at the same volume. You can emphasize and adjust the bass sound easily with the D-BASS control. This is similar in effect to an optional subwoofer system.



## Adjusting the bass curve

Turn the D-BASS control to adjust the bass level (1, 2, or 3).

"D-BASS" appears in the display.

To cancel, turn the control to OFF.

### Note

If the bass sound becomes distorted, adjust the D-BASS control or volume.

## Cancel the beep sound

Press **6** while pressing **SOUND**.

To obtain the beep sound again, press these buttons again.

### Note

If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.

# Additional Information

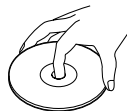
## Precautions

- If your car was parked in direct sunlight resulting in a considerable rise in temperature inside the car, allow the unit to cool off before operating it.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of a two-speaker system, set the fader control to the center position.
- If your car is equipped with a power antenna, it will extend automatically while the unit is operating.

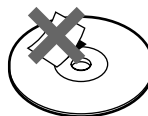
If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

## Notes on handling CDs

A dirty or defective disc may cause sound dropouts while playing. To enjoy optimum sound, handle the disc by its edge. To keep the disc clean, do not touch the surface.

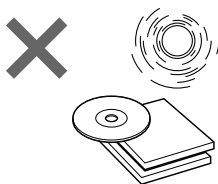


Do not stick paper or tape on the labeled surface.



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Do not expose the discs to direct sunlight or heat sources such as hot air-ducts, or leave them in a car parked in direct sunlight where there can be a considerable rise in temperature inside the car.



Before playing, clean the discs with an optional cleaning cloth. Wipe each disc from the center out.

Do not use solvents such as benzine, thinner, commercially available cleaners, or antistatic spray intended for analog discs.



### Notes on moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the CD player. Should this occur, the unit will not operate properly. In this case, remove the disc and wait for about an hour until the moisture evaporates.

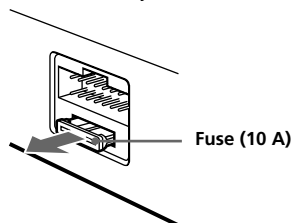
### When you play 8 cm (3 in.) CDs

Use the optional Sony compact disc single adapter (CSA-8) to protect the CD player from damage.

## Maintenance

### Fuse replacement

When replacing the fuse, be sure to use one matching the amperage rating stated on the original fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

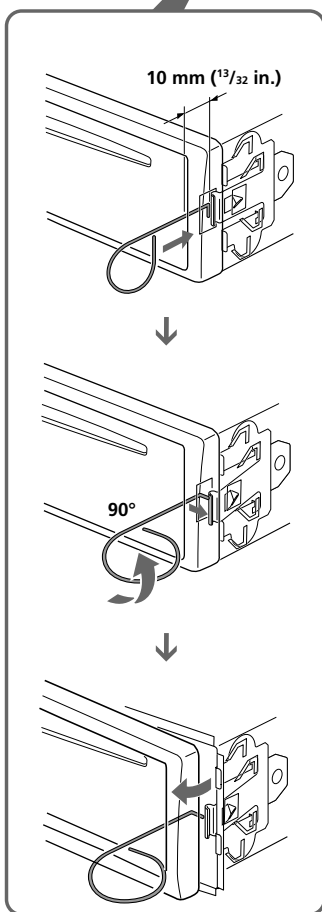
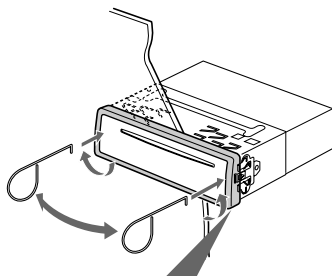


### Warning

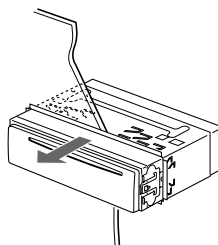
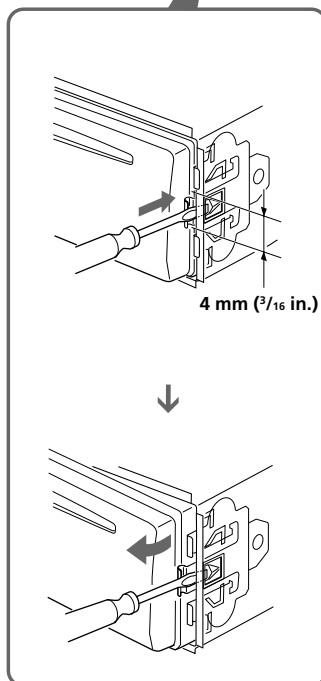
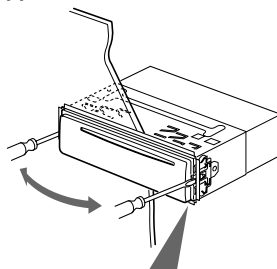
Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.

## Dismounting the unit

- 1 Insert the supplied tool between the unit and the frame, and rotate 90° to release the hidden mounting spring. Repeat on the opposite side and remove the frame.



- 2 Insert a flathead screwdriver between the bracket and mounting spring. Gently pry the spring toward the unit while pulling the unit out a little. Repeat on the opposite side and remove the unit.



# Specifications

## AUDIO POWER SPECIFICATIONS

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

14 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1 % total harmonic distortion.

## Other specifications

### CD player section

System	Compact disc digital audio system
Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit
Laser Diode Properties	
Material	GaAlAs
Wavelength	780 nm
Emission Duration	Continuous
Laser output power	Less than 44.6 μW*

\* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

### Tuner section

<b>FM</b>	
Tuning range	87.5 – 107.9 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	1.0 % (stereo), 0.7 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

<b>AM</b>	
Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.71 MHz/450 kHz
Sensitivity	30 μV

### Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	35 W × 4 (at 4 ohms)

### General

Outputs	Power antenna relay control Telephone ATT control lead
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178×50×185 mm (7 <sup>1</sup> / <sub>8</sub> × 2 × 7 <sup>3</sup> / <sub>8</sub> in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 162 mm (7 <sup>1</sup> / <sub>4</sub> × 2 <sup>1</sup> / <sub>8</sub> × 6 <sup>1</sup> / <sub>2</sub> in.) (w/h/d)
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections (1 set)
Optional accessories	Cleaning cloth XP-CD1 Compact disc single adapter CSA-8

Design and specifications are subject to change without notice.

# Troubleshooting guide

The following checklist will help you remedy the problems you may encounter with your unit. Before going through the checklist below, check the connection and operating procedures.

## General

Problem	Cause/Solution
No sound.	<ul style="list-style-type: none"><li>• Rotate the dial in a clockwise direction to adjust the volume.</li><li>• Set the fader control to the center position for two-speaker systems.</li></ul>
The contents of the memory have been erased.	<ul style="list-style-type: none"><li>• The power cord or battery has been disconnected.</li><li>• The reset button has been pressed. → Store the settings again into the memory.</li></ul>
No beep sound.	<ul style="list-style-type: none"><li>• An optional power amplifier is connected and you are not using the built-in amplifier.</li><li>• The beep sound is cancelled (page 9).</li></ul>

## CD playback

Problem	Cause/Solution
CD cannot be loaded.	<ul style="list-style-type: none"><li>• Another CD is already loaded.</li><li>• The CD was forcibly inserted upside down.</li></ul>
Play does not begin.	Dirty disc.
CD is automatically ejected.	The ambient temperature exceeds 50°C (122°F).
CD will not eject.	Press the ▲ button for two seconds.
The operation buttons do not function.	Press the reset button.
The sound skips due to vibration.	<ul style="list-style-type: none"><li>• The unit is installed at an angle of more than 60°.</li><li>• The unit is not installed in a sturdy part of the car.</li></ul>

## Radio reception

Problem	Cause/Solution
Preset tuning is not possible.	<ul style="list-style-type: none"><li>• Memorise the correct frequency.</li><li>• The broadcast signal is too weak.</li></ul>
Automatic tuning is not possible.	The broadcast signal is too weak. → Use manual tuning.
The "ST" indication flashes.	<ul style="list-style-type: none"><li>• Tune in the frequency accurately.</li><li>• The broadcast signal is too weak. → Set to the MONO mode (page 8).</li></ul>

continue to next page →

### Error displays

The following indications will flash for about five seconds.

Display	Cause	Solution
E .. 04	A CD is dirty or inserted upside down.	Clean or insert the CD correctly.
E .. 99	The CD player cannot be operated because of some problem.	Press the reset button or ▲.

If the above-mentioned solutions do not help improve the situation, consult your nearest Sony dealer.



